FIG.1

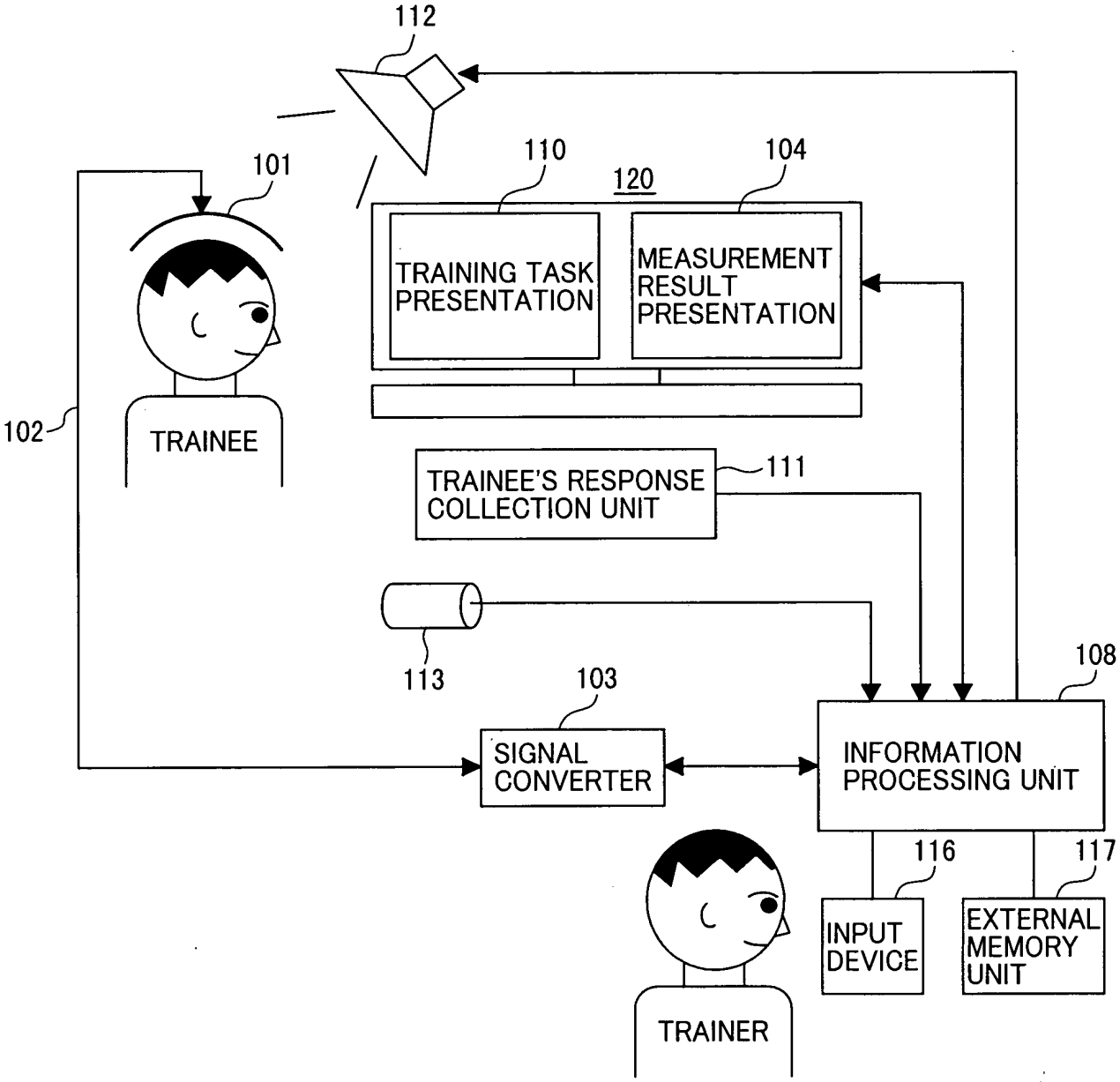
112
101
110
104
120
TRAINING TASK PRESENTATION
MEASUREMENT RESULT PRESENTATION
102
TRAINEE
TRAINEE'S RESPONSE COLLECTION UNIT
111
113
103
108
SIGNAL CONVERTER
INFORMATION PROCESSING UNIT
116
117
INPUT DEVICE
EXTERNAL MEMORY UNIT
TRAINER

FIG.2

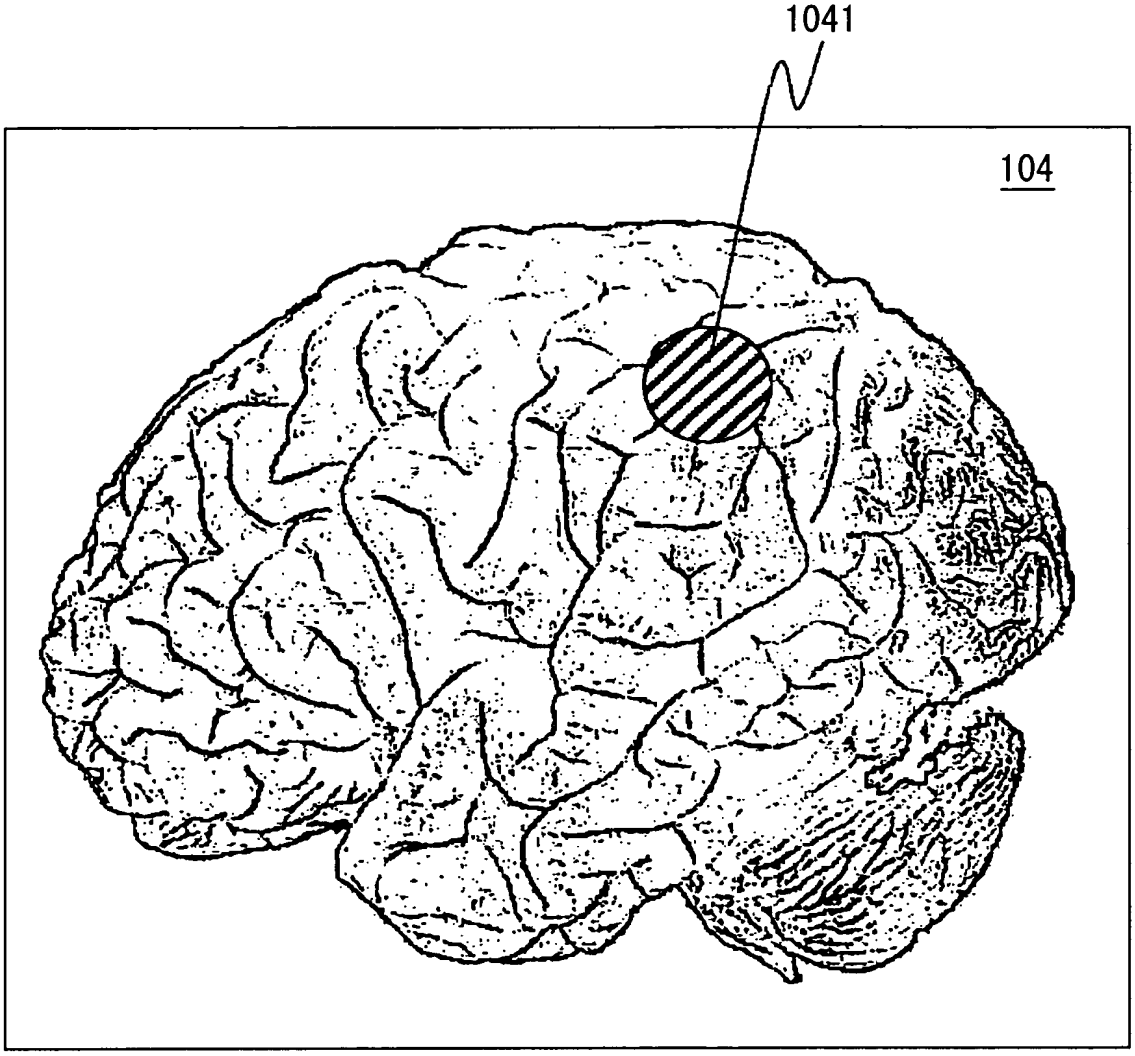

FIG.3

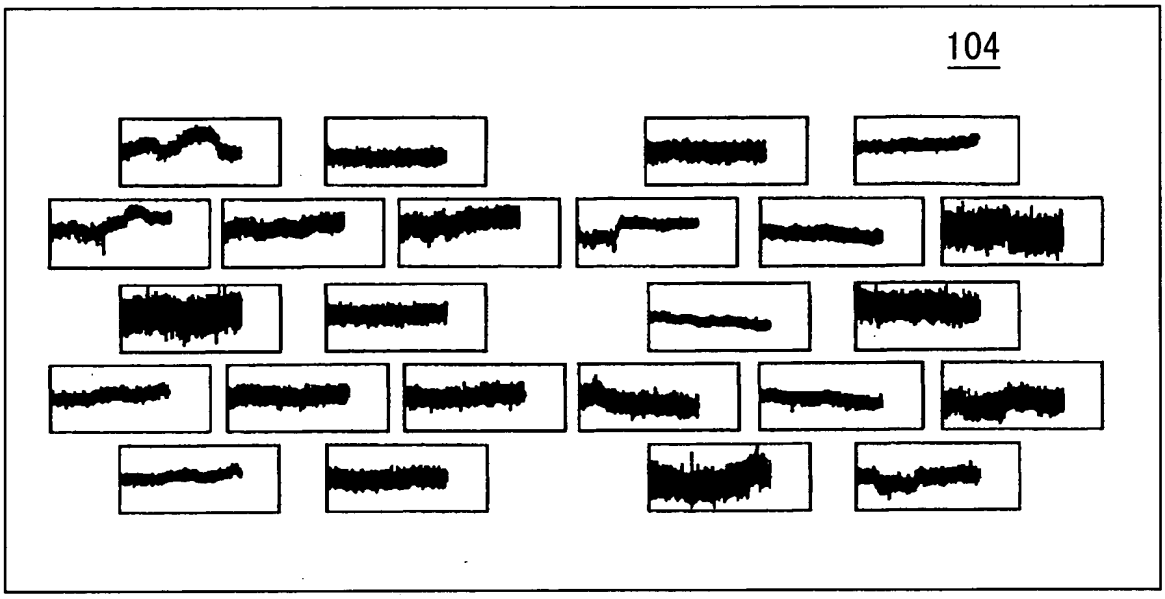

FIG.4

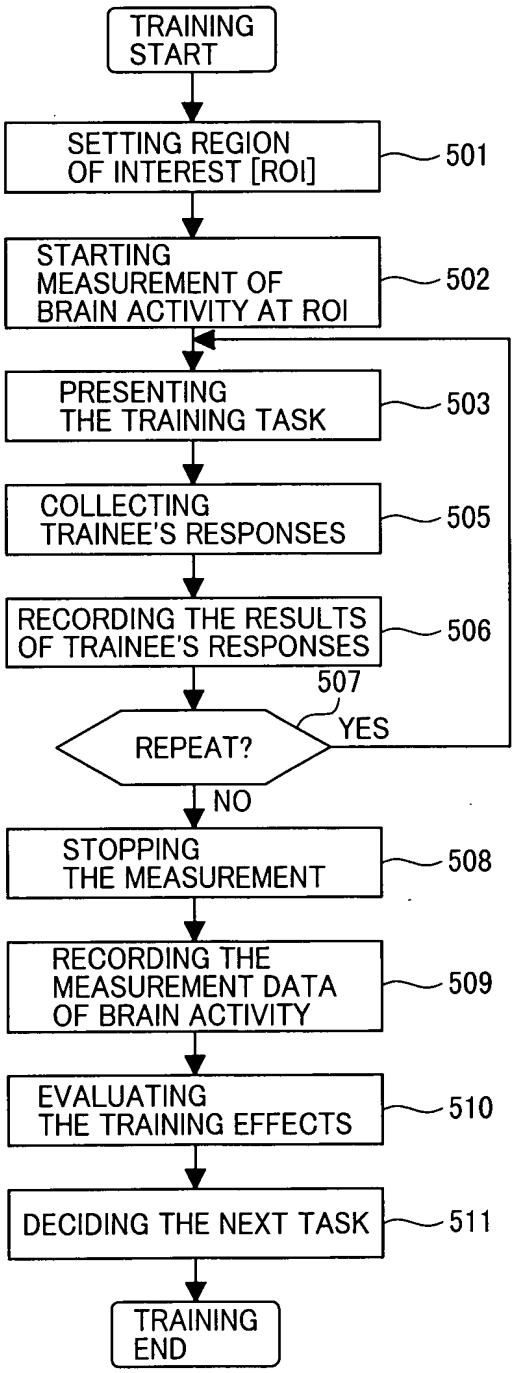
TRAINING START
SETTING REGION OF INTEREST [ROI]
501
STARTING MEASUREMENT OF BRAIN ACTIVITY AT ROI
502
PRESENTING THE TRAINING TASK
503
COLLECTING TRAINEE'S RESPONSES
505
RECORDING THE RESULTS OF TRAINEE'S RESPONSES
506
507
REPEAT?
YES
NO
STOPPING THE MEASUREMENT
508
RECORDING THE MEASUREMENT DATA OF BRAIN ACTIVITY
509
EVALUATING THE TRAINING EFFECTS
510
DECIDING THE NEXT TASK
511
TRAINING END

FIG.5

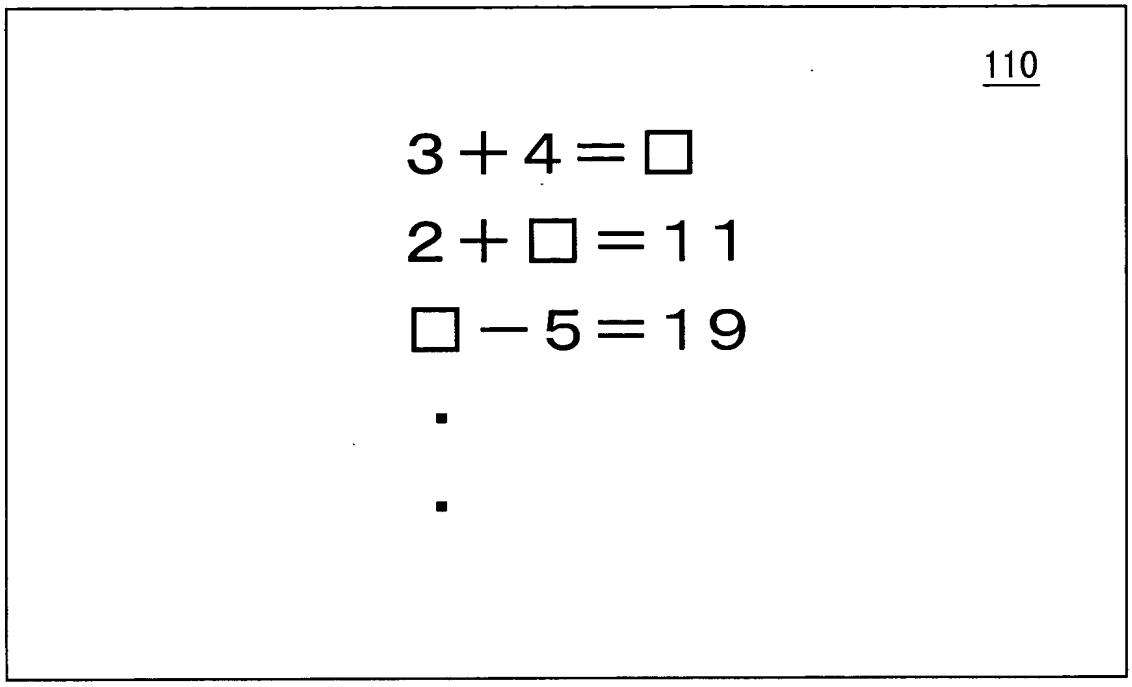

FIG.6

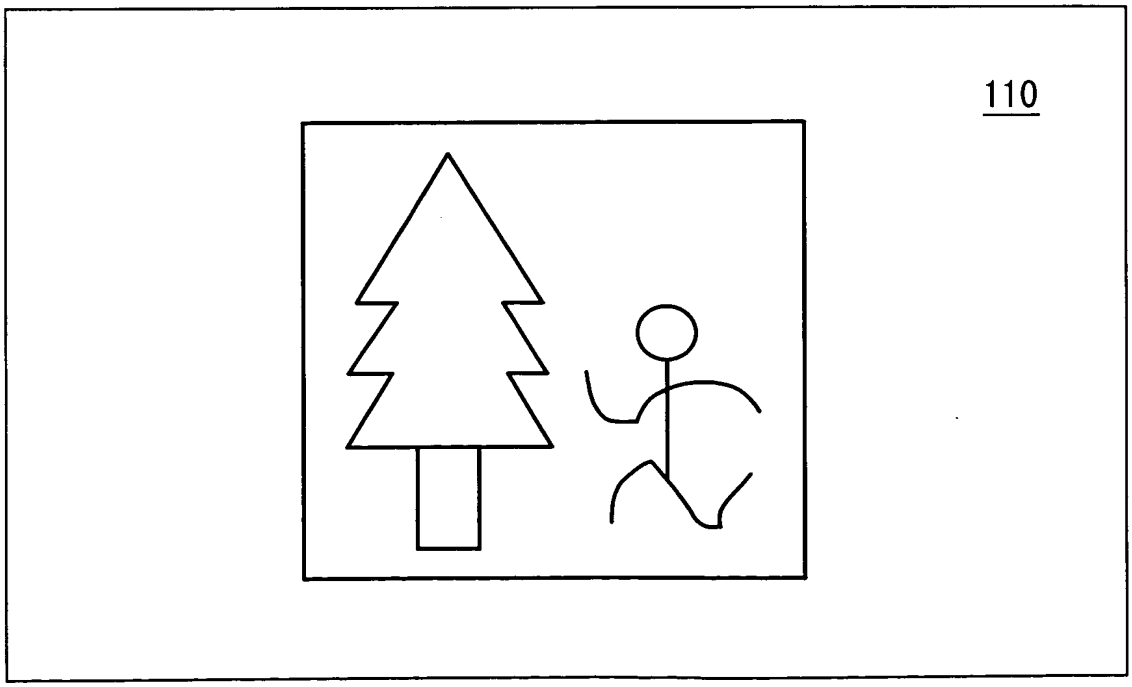

FIG.7A

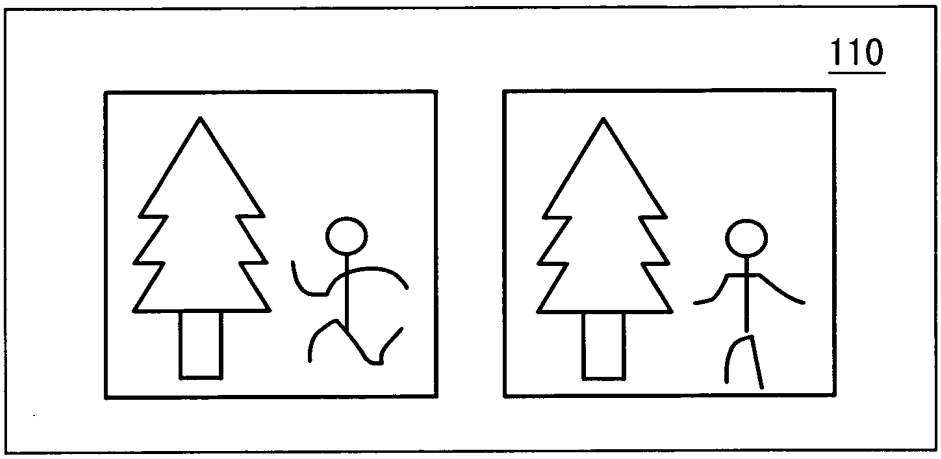

FIG.7B

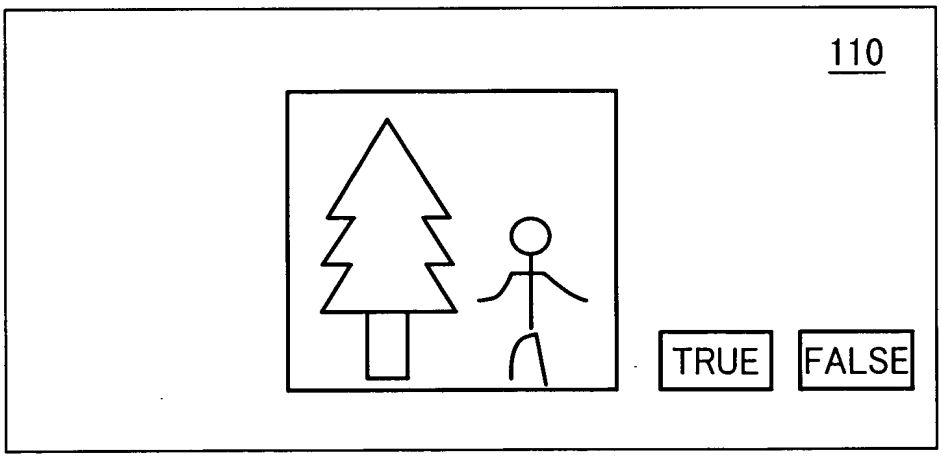

FIG.7C

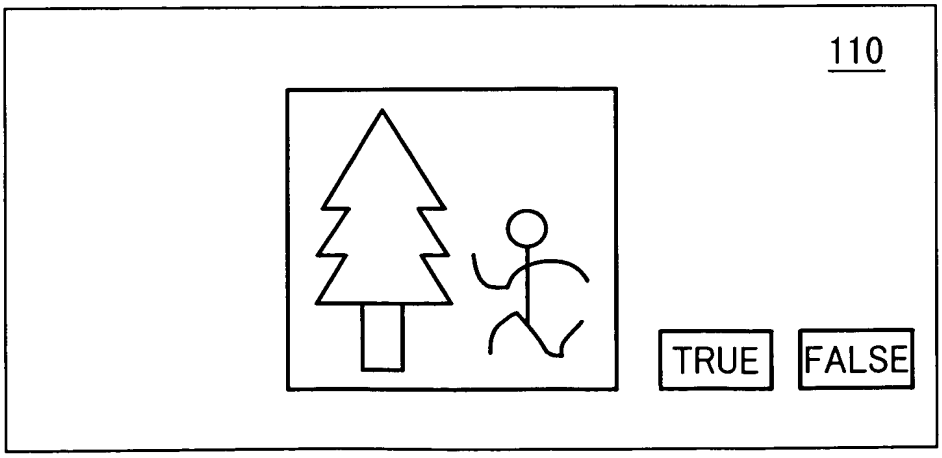

FIG.8

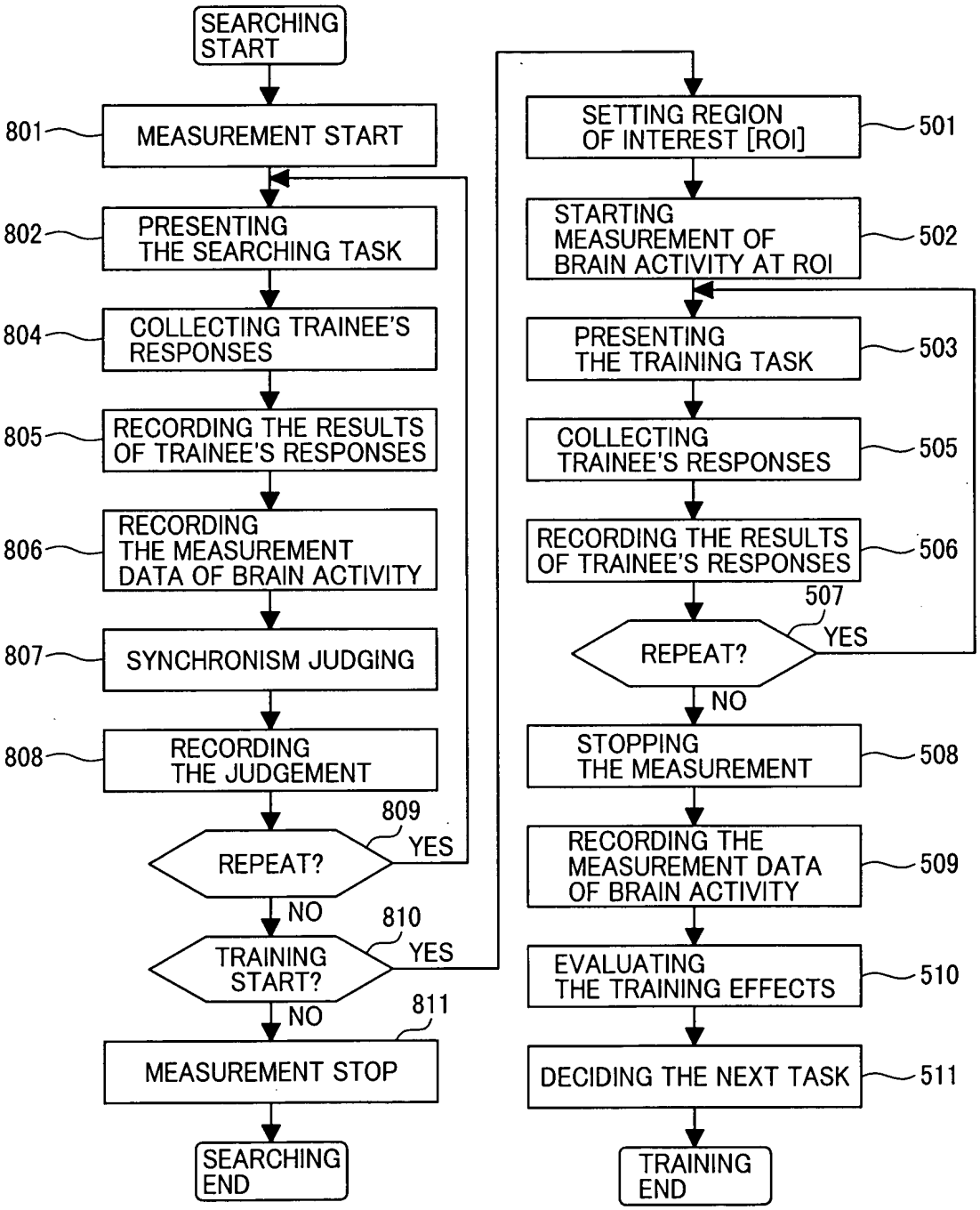
SEARCHING START
801
MEASUREMENT START
802
PRESENTING THE SEARCHING TASK
804
COLLECTING TRAINEE'S RESPONSES
805
RECORDING THE RESULTS OF TRAINEE'S RESPONSES
806
RECORDING THE MEASUREMENT DATA OF BRAIN ACTIVITY
807
SYNCHRONISM JUDGING
808
RECORDING THE JUDGEMENT
809
REPEAT?
YES
NO
810
TRAINING START?
YES
NO
811
MEASUREMENT STOP
SEARCHING END
SETTING REGION OF INTEREST [ROI]
501
STARTING MEASUREMENT OF BRAIN ACTIVITY AT ROI
502
PRESENTING THE TRAINING TASK
503
COLLECTING TRAINEE'S RESPONSES
505
RECORDING THE RESULTS OF TRAINEE'S RESPONSES
506
507
REPEAT?
YES
NO
STOPPING THE MEASUREMENT
508
RECORDING THE MEASUREMENT DATA OF BRAIN ACTIVITY
509
EVALUATING THE TRAINING EFFECTS
510
DECIDING THE NEXT TASK
511
TRAINING END

FIG.9A

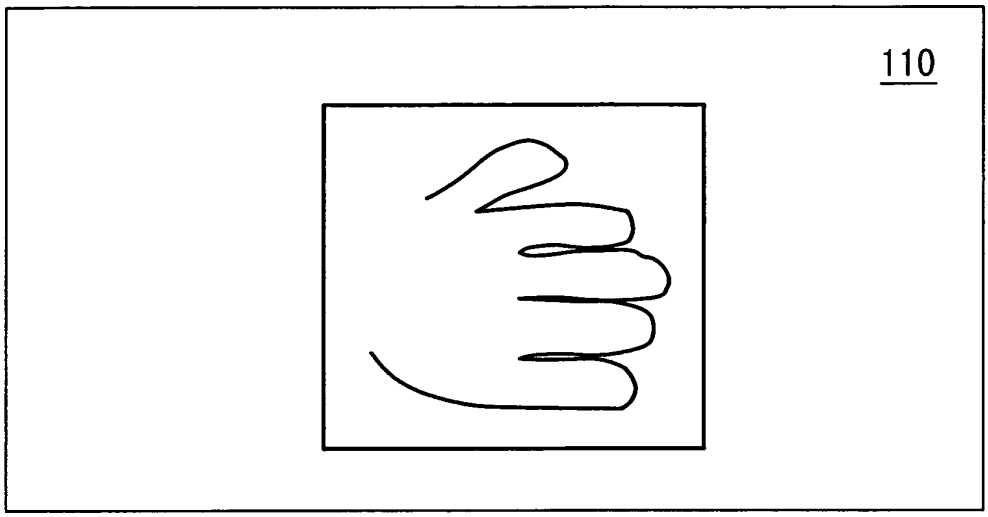

FIG.9B

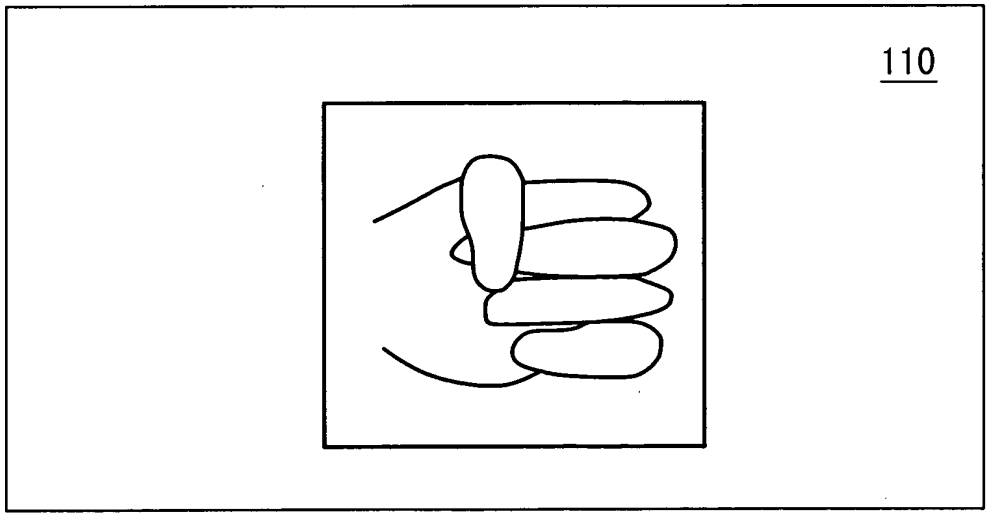

FIG.10

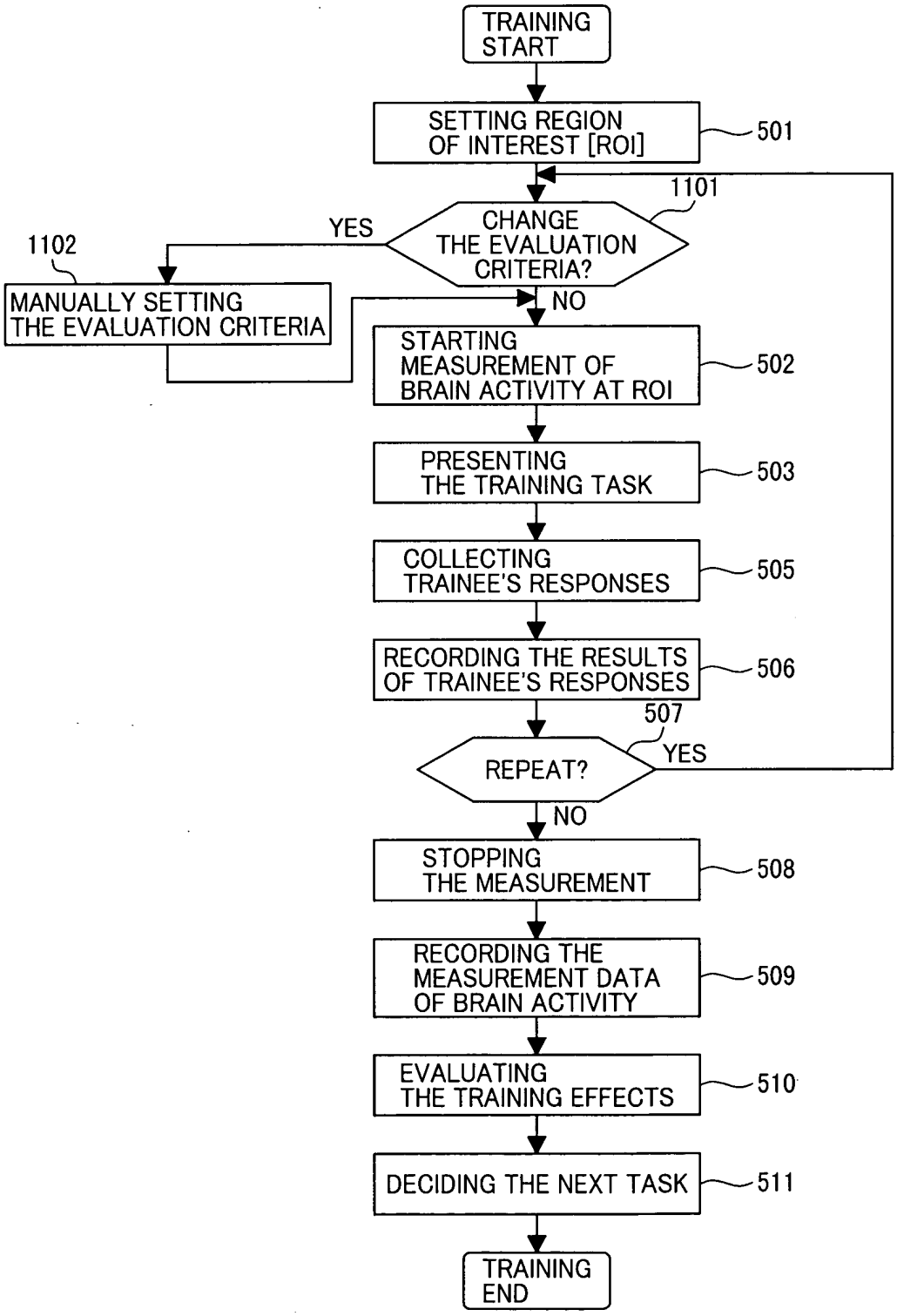
TRAINING START
SETTING REGION OF INTEREST [ROI]
501
1101
CHANGE THE EVALUATION CRITERIA?
YES
1102
MANUALLY SETTING THE EVALUATION CRITERIA
NO
STARTING MEASUREMENT OF BRAIN ACTIVITY AT ROI
502
PRESENTING THE TRAINING TASK
503
COLLECTING TRAINEE'S RESPONSES
505
RECORDING THE RESULTS OF TRAINEE'S RESPONSES
506
507
REPEAT?
YES
NO
STOPPING THE MEASUREMENT
508
RECORDING THE MEASUREMENT DATA OF BRAIN ACTIVITY
509
EVALUATING THE TRAINING EFFECTS
510
DECIDING THE NEXT TASK
511
TRAINING END

FIG.11

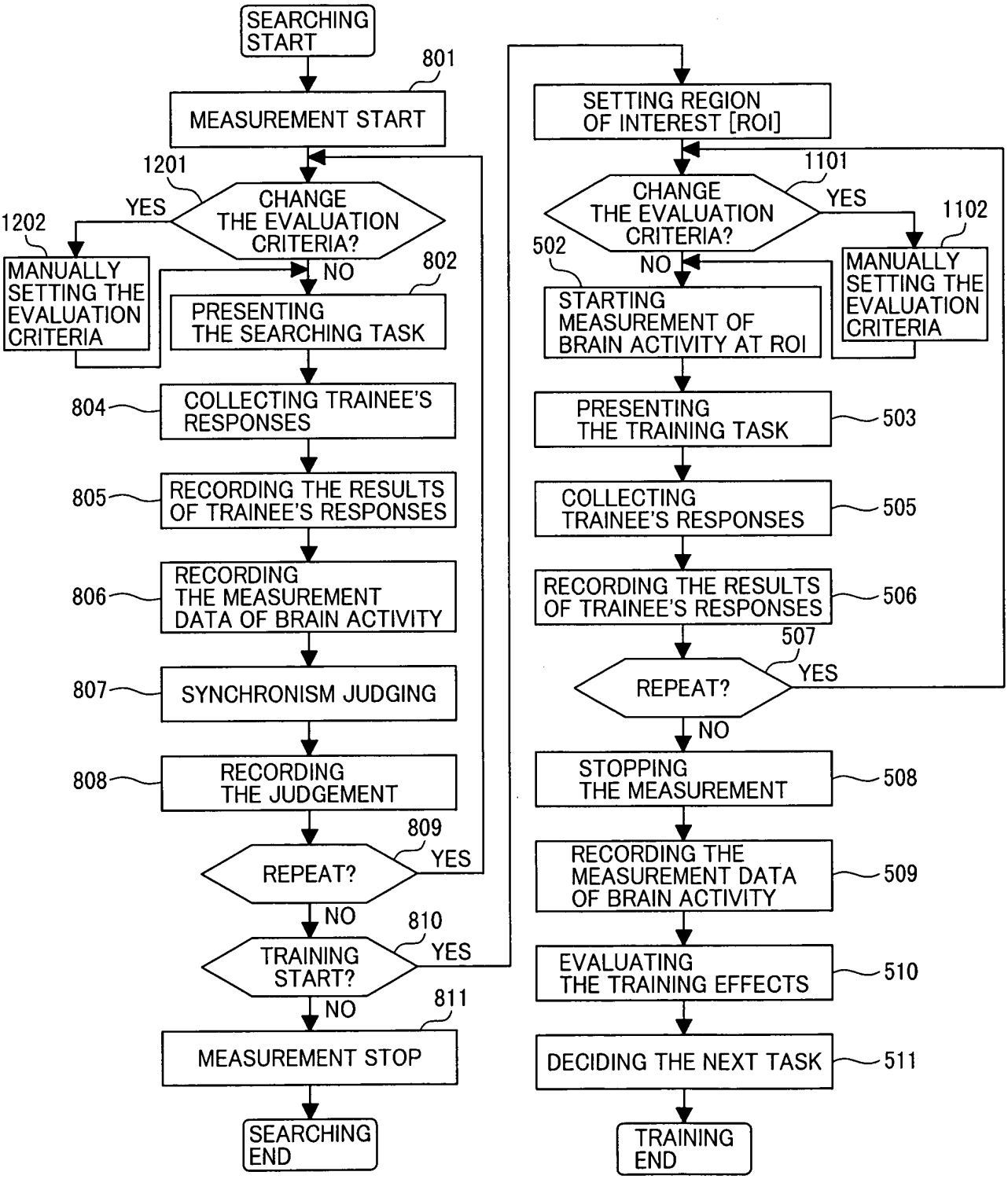
SEARCHING START
801
MEASUREMENT START
1201
CHANGE THE EVALUATION CRITERIA?
YES
1202
MANUALLY SETTING THE EVALUATION CRITERIA
NO
802
PRESENTING THE SEARCHING TASK
804
COLLECTING TRAINEE'S RESPONSES
805
RECORDING THE RESULTS OF TRAINEE'S RESPONSES
806
RECORDING THE MEASUREMENT DATA OF BRAIN ACTIVITY
807
SYNCHRONISM JUDGING
808
RECORDING THE JUDGEMENT
809
REPEAT?
YES
NO
810
TRAINING START?
YES
NO
811
MEASUREMENT STOP
SEARCHING END
SETTING REGION OF INTEREST [ROI]
1101
CHANGE THE EVALUATION CRITERIA?
YES
1102
MANUALLY SETTING THE EVALUATION CRITERIA
NO
502
STARTING MEASUREMENT OF BRAIN ACTIVITY AT ROI
PRESENTING THE TRAINING TASK
503
COLLECTING TRAINEE'S RESPONSES
505
RECORDING THE RESULTS OF TRAINEE'S RESPONSES
506
507
REPEAT?
YES
NO
STOPPING THE MEASUREMENT
508
RECORDING THE MEASUREMENT DATA OF BRAIN ACTIVITY
509
EVALUATING THE TRAINING EFFECTS
510
DECIDING THE NEXT TASK
511
TRAINING END

FIG.12A

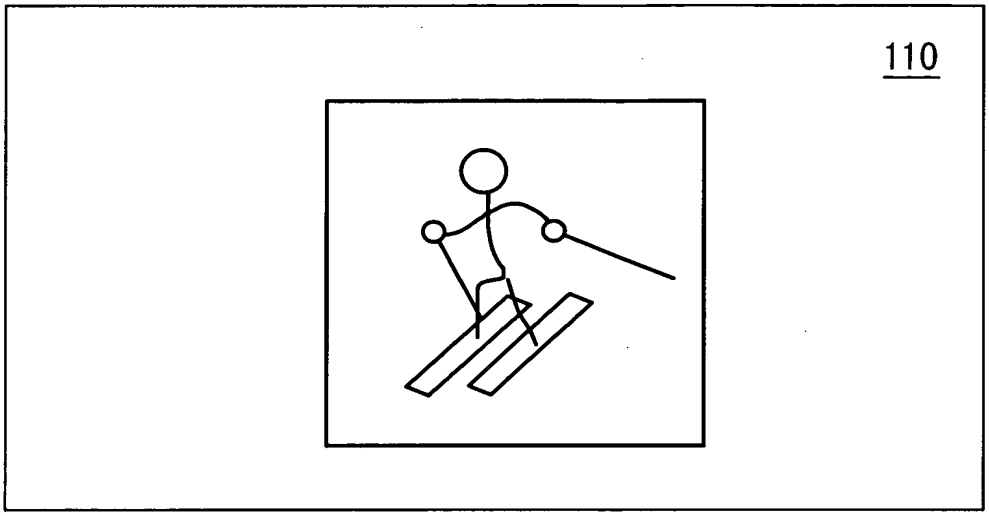
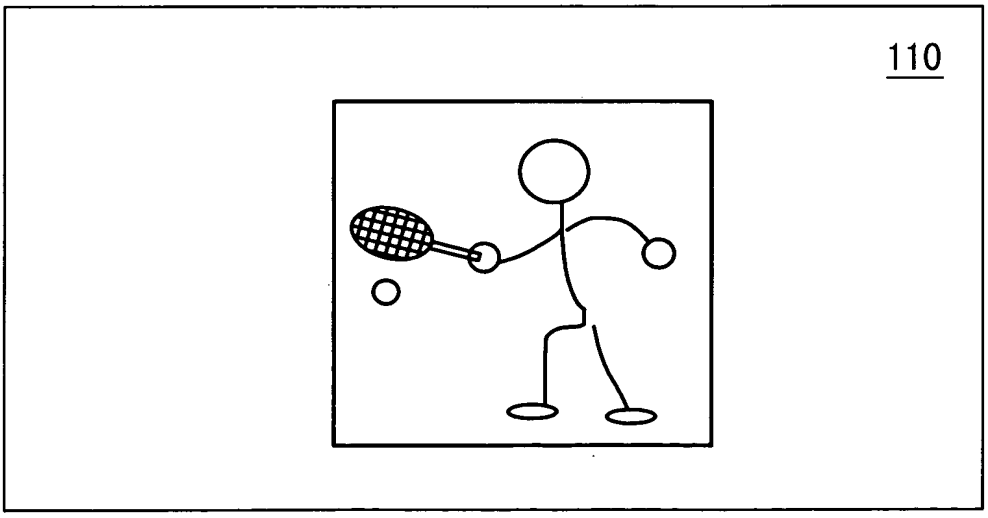
FIG.12B